AMENDMENTS TO THE CLAIMS:

Without prejudice, this listing of the claims replaces all prior versions and listings of the claims in the present application:

LISTING OF CLAIMS:

1. (Currently Amended) A method for controlling an execution of a computer program having multitasking capability on a ~~computing element~~ microprocessor of a controller for at least one of controlling and regulating a driving dynamics system in a motor vehicle that is able to assume various possible system states, the computer program being subdivided into a plurality of tasks to which various priorities are allocated, the tasks being processed in various time patterns in a certain processing sequence depending on the time patterns and the priorities of the tasks, the method comprising:

on a functional plane, subdividing the computer program into a plurality of functionally linked functionalities, each comprising at least one of the tasks;

allocating specifiable operating states to the functionalities for each of the system states;

defining transition conditions for each possible transition of one of the system states into another of the system states; and

controlling the execution of the computer program in such a way that the system is transitioned from a first system state into a second system state only when all of the transition conditions defined for the transition have been fulfilled;

wherein the transition conditions are satisfied if at least the functionalities which characterize the second system state have the operating states allocated to them for the second system state.

2. (Canceled).

3. (Original) The method as recited in claim 1, wherein each one of the transition conditions includes at least one transition interrogation and at least one corresponding transition value as a response given to the transition interrogation, the one of the transition conditions being regarded as having been fulfilled when the transition value is returned as the response to the transition interrogation.

4. (Currently Amended) The method as recited in claim 3, further comprising:

~~filing~~ storing the transition values in a transition table.

5. (Canceled).

6. (Currently Amended) The method as recited in claim [[5]] 1, wherein each of the operating states is defined by an operating state variable which is able to take on various operating state values, and wherein the transition conditions are satisfied if at least the operating state variables of the functionalities which characterize the second system state have the operating state values defined for them for the second system state.

7. (Currently Amended) The method as recited in claim [[5]] 6, wherein the operating state variable is able to take on operating state values corresponding to the settings "full functionality", "limited functionality" and "no functionality".

8. (Currently Amended) The method as recited in claim [[5]] 1, further comprising:
assigning a transition table to each of the functionalities.

9. (Currently Amended) The method as recited in claim [[5]] 1, wherein a plurality of functionalities are combined into a component and a transition table is assigned to the component.

10 to 14. (Canceled).

15. (Currently Amended) A storage element storing a control program for controlling execution of a computer program having multitasking capability on a ~~computing element~~ microprocessor of a controller for at least one of controlling and regulating a driving dynamics system in a motor vehicle that is able to assume various possible system states, the computer program being subdivided into a plurality of tasks to which various priorities are allocated, the tasks being processed in various time patterns in a certain processing sequence depending on the time patterns and the priorities of the tasks, the control program being executable on the ~~computing element~~ microprocessor, wherein the control program causes the computing element to perform a method comprising:

on a functional plane, subdividing the computer program into a plurality of functionally linked functionalities, each comprising at least one of the tasks;

allocating specifiable operating states to the functionalities for each of the system states;

defining transition conditions for each possible transition of one of the system states into another of the system states; and

controlling the execution of the computer program in such a way that the system is transitioned from a first system state into a second system state only when all of the transition conditions defined for the transition have been fulfilled;

wherein the transition conditions are satisfied if at least the functionalities which characterize the second system state have the operating states allocated to them for the second system state.

16. (Original) The storage element as recited in claim 15, wherein the control program is stored on one of a storage read-only memory, a random access memory, or a flash memory.

17. (Currently Amended) A controller for at least one of controlling and regulating a driving dynamics system in a motor vehicle that ~~which~~ is able to assume various possible system states, comprising:

a ~~computing element~~ microprocessor on which a computer program having multitasking capability may be run the computer program being subdivided into a plurality of tasks to which various priorities are allocated, and the computer program, on a functional plane, being subdivided into a plurality of functionally linked functionalities, each comprising at least one of the tasks;

an arrangement for controlling execution of the computer program, the tasks being processed in various time patterns in a certain processing sequence depending on the time patterns and the priorities of the tasks;

an arrangement for allocating specifiable operating states to the functionalities for each of the system states; and

an arrangement for defining transition conditions for every possible transition from one system state into another system state;

wherein the arrangement for controlling the execution of the computer program controls the execution of the computer program in such a way that the system changes from a first system state into a second system state only when all of the transition conditions defined for the transition are fulfilled;

wherein the transition conditions are satisfied if at least the functionalities which characterize the second system state have the operating states allocated to them for the second system state.

18. (Canceled).

19. (Original) The controller as recited in claim 17, wherein each one of the transition conditions includes at least one transition interrogation and at least one corresponding transition value as a response given to the transition interrogation, the one of the transition conditions being regarded as having been fulfilled when the transition value is returned as the response to the transition interrogation.

20. (Previously Presented) The controller as recited in claim 17, wherein the arrangement for controlling the execution of the computer program includes a control program which is executable on the computing element.

21. (Previously Presented) The method as recited in claim 1, wherein an availability of at least one input variable required for performance by the computer program of at least one task is dependent on performance by the computer program of at least one other task, and wherein satisfaction of at least one of the transition conditions is dependent upon the availability of the at least one input variable for the performance of the at least one task.

22. (Previously Presented) The method as recited in claim 21, wherein a frequency of performance of the at least one task and a frequency of performance of the at least one other task differ.

23. (Previously Presented) The method as recited in claim 4, wherein the transition table is a knowledge database stored on a storage element.

24. (Previously Presented) The storage element as recited in claim 15, wherein an availability of at least one input variable required for performance by the computer program of at least one task is dependent on performance by the computer program of at least one other task, and wherein satisfaction of at least one of the transition conditions is dependent upon the availability of the at least one input variable for the performance of the at least one task.

25. (Previously Presented) The controller as recited in claim 17, wherein an availability of at least one input variable required for performance by the computer program of at least one task is dependent on performance by the computer program of at least one other task, and wherein satisfaction of at least one of the transition conditions is dependent upon the availability of the at least one input variable for the performance of the at least one task.